Manitoba Monthly Communicable Disease Report

Reported up to September 30, 2009

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 69% of all non-STI/HIV related communicable diseases reported to Manitoba Health and Healthy Living during September 2009.

2. **Sexually Transmitted Infections (STI) & Blood-Borne Pathogens (BBP)**
   There were 635 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in September 2009:
   - 545 reported cases of chlamydia (Ct) only
   - 54 reported cases of gonorrhoea (GC) only
   - 34 reported co-infections of Ct and GC and
   - 2 reported cases of syphilis

   Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 48% of all reported chlamydia cases in the province.

   In September 2009, there were no cases of Hepatitis B virus (HBV), 23 cases of Hepatitis C virus (HCV) and 5 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
   The number of reported cases in September 2009 was within the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Amebiasis – 7 positive lab confirmed cases reported; less than 5 expected in an average month.
   - Strongyloides – 3 positive lab confirmed cases reported; less than 3 expected in an average month.

   The expected number of cases and range is statistically based on the number of reported cases during August, September, and October, 2004-2008.

Explanatory Notes:

General:

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used

will be the specimen collection date. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

SUMMARY OF COMMUNICABLE DISEASE FOR September 2009

ICD9	DISEASE/INFECTION	MONTHLY TOTAL				YEAR-TO-DATE	
		2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	1	7	2	0-4	26	33
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS			0	0-1	1	5
320.1	BAC. MENINGITIS - PNEUM	1		0	0-1	2	3
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	18	6		***	104	119
116.0	BLASTOMYCOSIS	2	1		***	10	5
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		1
005.2	C. PERFRINGENS			1	0-3		2
008.43	CAMPYLOBACTER	33	27	27	16-38	177	179
558.2	CLOSTRIDIUM DIFFICILE	68	58		***	650	620
046.1	CREUTZFELD-JACOB DISEASE				***	1	2
007.8	CRYPTOSPORIDIOSIS	22	13	9	0-27	55	29
061.0	DENGUE FEVER			0	0-0	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS	1		0	0-1	5	1
032	DIPHTHERIA CASES			0	0-0	1	
123.4	DIPHYLLOBOTHRIUM SPP			1	0-4	5	1
008.0	E. COLI-VEROTOXIGENIC	4	5	11	0-37	27	34
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	12	14	13	4-22	106	91
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)	1		0	0-1	2	3
041.59	HAEM. INFLUENZAE (non-B)				***	9	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	1		1	0-3	8	10
070.3	HEPATITIS B	2		1	0-3	4	3
070.51	HEPATITIS C	27	23	31	20-42	270	268
487.1A	INFLUENZA A****				***	78	88
487.1B	INFLUENZA B				***	44	38
482.83	LEGIONELLA			0	0-1		
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES	1		1	0-2	5	2
088.81	LYME DISEASE			1	0-3	5	
084	MALARIA	2		2	0-4	9	7
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1	2	
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1	2	
B95.6	MRSA	283	328	183	30-336	1814	1976
072.9	MUMPS	1		1	0-3	1	5
036.89	N.MENINGITIDIS OTHER		1	0	0-1		6
728.86	NECROTIZING FASCIITIS			1	0-4	12	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	1		2	0-6	15	23
038.2	PNEUM. SEPTICEMIA	4	11	7	0-16	84	86
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years

** Mean +/- 2 standard deviations of mean

*** Data collected for less than 5 years.

**** Influenza A excludes novel H1N1. There were 3 cases of novel H1N1 in September 2009.

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2008	2009	Expected*	Ex. Range**	2008	2009
083.0	Q FEVER			0	0-0	1	1
056.9	RUBELLA			0	0-0		2
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER		1	0	0-2	2	9
003.0	SALMONELLA	12	23	15	6-24	189	196
120	SCHISTOSOMIASIS		1	0	0-1		1
004	SHIGELLOSIS	3	2	2	0-6	20	18
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	
481.9	STREP PNEUMONIA - PR			0	0-1	1	
041.1	STREP PYOGENES - OTHER STER	4	13		***	28	79
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		
481	STREPTOCOCCUS PNEUMONIAE			0	0-0	2	
127.2	STRONGYLOIDES	2	3	1	0-2	5	8
037	TETANUS			0	0-1		
130.9	TOXOPLASMOSIS			0	0-1		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-1		
013	TUBERCULOSIS - NON-RESP.	3	1	2	0-6	16	21
010	TUBERCULOSIS - PRIM.		1	1	0-3	4	9
011	TUBERCULOSIS - RESP	8	14	8	0-16	83	100
021.9	TULAREMIA		1	0	0-1	1	1
002.0	TYPHOID			0	0-0	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	6	6		***	56	60
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROME				***	2	
008.44	YERSINIA ENTEROCOLITICA	6	2	2	0-5	11	6
		529	**562**			**3959**	**4157**

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years

** Mean +/- 2 standard deviations of mean

*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR September 2009

		<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gendr	
006.9	AMEBIASIS					1	1				2	1	1								1								7
038.0	BETA STREP SEPTICEMIA	1																					1		1	3			6
116.0	BLASTOMYCOSIS																									1			1
008.43	CAMPYLOBACTER			3	3	1		1	2	2				2	1	3	1		1		3	1		2			1		27
558.2	CLOSTRIDIUM DIFFICILE				1		1		1				1	3		2	3	2	2	1	1	6	7	10	6	5	6		58
007.8	CRYPTOSPORIDIOSIS			2	1	1	1		2	2				2			1							1					13
008.0	E. COLI 0157							2				1		1						1									5
007.1	GIARDIA LAMBLIA			2	2				1	1		1	1		1		2		1				1			1			14
070.51	HEPATITIS C									1		1			1	3	2	2	6	1	2	1	1	1				1	23
B95.6	MRSA	8	13	17	26	12	12	11	7	11	11	13	11	7	8	17	17	11	8	8	17	12	18	10	11	16	16		328
036.89	NEISSERIA MGTS(0ther)																		1										1
038.2	PNEUM. SEPTICEMIA		1			1	1										1		2		2		2		1				11
003.0	SALMONELLA			2	2		1	2	1		1		1			1	1	2	1		1	2	1		1	1	2		23
120	SCHISTOSOMIASIS						1																						1
004	SHIGELLOSIS						1									1													2
041.1	STREP PYOGENES - OTHER ST	1	1	1						1					1	1	1		2	1	1		1			1			13
041.2	STREP.PNEUM.OTHER											1																	1
127.2	STRONGYLOIDIASIS															2	1												3
013	TUBERCULOSIS - NON-RESP.																	1											1
010	TUBERCULOSIS - PRIM.		1																										1
011	TUBERCULOSIS - RESP									1	1			1		3	2	1	3	1	1								14
021.9	TULAREMIA																				1								1
B96.8	VANCOMYCIN RES. ENTER.															1				1	2	1		1					6
008.44	YERSINIA ENTEROCOLITICA													1					1										2
		10	16	27	35	16	19	16	14	19	15	18	15	17	12	34	32	19	28	14	32	23	32	25	20	28	25		562

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR September 2009

ICD9	Disease/Infection	Winnipeg	Brandon	N.Eastman		S.Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
*Case Referred to:**				*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	5					2																7
038.0	BETA STREP SEPTICEMIA	2	1				1		2														6
116.0	BLASTOMYCOSIS	1																					1
008.43	CAMPYLOBACTER	10					3		3		3		5		3								27
558.2	CLOSTRIDIUM DIFFICILE	27	5				1		5		5		8		2		2		3				58
007.8	CRYPTOSPORIDIOSIS	1					1		1		2		5		3								13
008.0	E. COLI 0157	3											1		1								5
007.1	GIARDIA LAMBLIA	7									4		2		1								14
070.51	HEPATITIS C	13	4		2		3								1								23
B95.6	MRSA	106	5	20	3		6	2	8		9		3	3	10	3	6	136	7		1		328
036.89	NEISSERIA MGTS(0ther)								1														1
038.2	PNEUM. SEPTICEMIA	5									1		1				1	2	1				11
003.0	SALMONELLA	4	1	1	3		1		2		3			1	5			2					23
120	SCHISTOSOMIASIS	1																					1
004	SHIGELLOSIS	1					1																2
041.1	STREP PYOGENES - OTHER ST.	8			2		1												2				13
041.2	STREP.PNEUM.OTHER																	1					1
127.2	STRONGYLOIDIASIS	2					1																3
013	TUBERCULOSIS - NON-RESP.																	1					1
010	TUBERCULOSIS - PRIM.																	1					1
011	TUBERCULOSIS - RESP	9		1														2	2				14
021.9	TULAREMIA	1																					1
B96.8	VANCOMYCIN RES. ENTER.	5			1																		6
008.44	YERSINIA ENTEROCOLITICA								1		1												2
		211	**16**	**22**	**11**		**21**	**2**	**23**		**28**		**25**	**4**	**26**	**3**	**9**	**145**	**15**		**1**		**562**

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province

STD Infection Summary Report - September 2009

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	**2008**	**2009**	**2008**	**2009**
All Chlamydia Infections	624	579	5221	4881
All Gonorrhea Infections (including PRNG)	108	88	1091	841
All Syphilis Infections	14	2	45	35
Gonorrhea & Chlamydia Co-infections	48	34	484	351
HIV	11	5	72	83

Total Number of STD Cases by Age and Gender - September 2009

	<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gendr	
Chlamydia Only Cases					2		12		147	51	113	66	54	32	38	17	8	4							1			545
Gonorrhea Only Cases									7	5	14	7	4	5	4	3		3		1		1						54
Syphilis Only Cases																								1	1			2
GC and CT Cases									3	5	11	2	3	5	1	4												34
					2		12		157	61	138	75	61	42	43	24	8	7		1		1		1	2			635
HIV														2			1	2										5

Regional STD Distribution - September 2009

Disease/Infection	Winnipeg	Brandon	N.Eastman		S.Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
Case Referred to:*			*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
All Chlamydia Infections	271	28	13	15		12	13	17		34		25	4	22	3	27	55	32	2	5	1	579
All Gonorrhea Infections	39	5	3				3	1		7		1		2	3	4	11	5	1	2	1	88
All Syphilis Infections	2																					2
GC and CT Infections	9	2	1							4		1		2	2	2	7	2	1	1		34

* F=Federal Jurisdiction (includes First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province